DOCUMENT RESUME

ED 212 424 RC 013 156

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TITLE Access of Rural Girls to Primary Education in the Third World: State of Art, Obstacles, and Policy Recommendations.
SPONS AGENCY Agency for International Development (Dept. of State), Washington, D.C.
PUB DATE Oct 79
NOTE 33p.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Access to Education; Adult Education; Cultural Context; *Developing Nations; Dropouts; Economically Disadvantaged; Educational Discrimination; Educationally Disadvantaged; *Elementary Education; *Females; Foreign Countries; Illiteracy; Parent Attitudes; Poverty; Rural Areas; Rural to Urban Migration; *Rural Youth; Sex Differences; *Sex Discrimination; Sex Stereotypes; Teacher Attitudes
IDENTIFIERS *Third World Education Systems

ABSTRACT

In the Third World, women's literacy and access to primary education lags behind that of men, and the situation is more accentuated for rural than for urban women. In general, rural women have lower literacy than rural men and than urban women. Because a considerable percentage of girls enrolled in primary school are over 14 years old, marriage, pregnancy, and loss of interest in school often prevent graduation from primary school. Rural girls' access to formal education is the key to their integration into the development efforts of their countries and to better employment and marital options. Primary school education also provides rural women with the option of migration to urban areas. Obstacles to rural women's access to elementary education include: numerous household and childcare responsibilities; competing involvement in productive activities; parents' negative attitudes toward daughters' education; parents' limited financial and educational resources; shortage of schools; shortage of women school teachers and negative attitudes of male teachers; malnutrition and chronic infections; and educational sex-segregation. Policies which would increase access of low income boys and girls to primary education are needed. Additionally, policies directed specifically toward rural girls are needed to increase the probability that girls and boys will benefit equally. (Author/CM)

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ACCESS OF RURAL GIRLS TO PRIMARY EDUCATION IN THE THIRD WORLD: STATE OF ART, OBSTACLES, AND POLICY RECOMMENDATIONS

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OCTOBER 1979

U.S. DEPARTMENT OF EDUCATION
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RC013156

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I. State of the Art

The Statistical Picture

In the Third World, women's literacy and access to primary education still lags behind that of men, and the situation is more accentuated for rural than for urban women. The present picture as well as the degree of progress made in increasing women's access to formal education varies considerably from continent to continent and from country to country. In Latin America, for example, women's access to primary education is equal to that of men, and this access has spread quite widely since 1975, when 78% of girls (and boys) 6-11 years old were enrolled in school (UNESCO 1977:53-56). Despite almost universal literacy in many Latin American countries, rural women (and men) still often have less access to formal education than urban women and men. In Asia, although the increase in the number of girls 6-11 years of age attending school is the greatest in the Third World (UN, ECOSOC 1979), the discrepancy between girls and boys of that age enrolled in school is still large (50 percent of girls and 71 percent of boys in 1975) (UNESCO 1977). The greatest discrepancy between boys' and girls' access to primary education is found among low income Asian countries, particularly Afghanistan, Bhutan, and Nepal where girls represent less than 20 percent of primary school students (UNESCO 1977). In Africa where girls are permitted to attend primary school from ages 6-18, the gap between women and men seems to have widened from 1960 to 1975 rather than diminished, especially in the 12-17 age group (UNESCO 1977; UN, ECOSOC 1979). In West Africa, despite increases in total enrollment of girls, female enrollment still lags behind that of boys, and, according to UNESCO projections, these disparities will further increase by 1985 (UNESCO 1977:37). Girls in West and Middle Africa will continue to have

less access to formal education than in other Third World countries.

In general, the overall trends indicate that women's access to primary education continues to be least in the low income nations of Africa, Asia, but not of Latin America, as well as in North Africa and the Middle East. In these areas, about one-third or less of the primary school students are women (UNESCO 1977).

The statistical picture becomes clearer and more meaningful, however, when we come down to the level of specific countries. In 1971, for example, 18.4 percent of Indian women and 39.5 percent of Indian men were literate (Status 1975:155). But the discrepancy between rural and urban Indian women was even larger: 13.2 percent of the rural and 42.3 percent of the urban women were literate (Jacobson 1977:35). Even within Indian states, there is considerable variation from Kerala (where 53.1 percent of rural and 60.6 percent of urban women are literate) to Bihar (with 6.4 percent of the rural women literate) and to Rajastan (with 4 percent of the rural women literate) (Status 1975:8-9). The situation is even more extreme in Morocco where, in 1971, 14 percent of all women were literate, but among rural women only 2 percent were literate as against 38 percent of the urban women (USAID 1978). Similarly in Yemen, only 2.4 percent of the rural women were literate (Myntti 1978). At the other extreme, Chile approaches universal literacy for both women and men and El Salvador has achieved sex parity in literacy although rural men and women lag behind the urban population. Thailand is the Asian counterpart of this type with female literacy in rural areas now almost universal (Bowman and Anderson 1978).

In general, rural women have consistently lower literacy than rural men but also lower literacy than urban women. It must be underlined, however,

that literacy is not the most important indicator of access to primary education since in some countries literacy does not necessarily imply school enrollment and even less often primary school graduation. For example, about 20 percent of the literate women in the slums of Istanbul acquired literacy without schooling (Karpart 1976). In India 40 percent of women literates have not completed primary school (Status 1975:9). This is significant because primary school graduation is critical for admission to valuable vocational training in agriculture.

We must be aware that enrollment statistics are often not meaningful and accurate unless the cohorts of entering students are traced through graduation because the dropout and grade repeat rates for all students, particularly girls, are quite high. Completion of grade four can be taken as an indication of the level of education needed in order to become and remain literate. Only about half of the children who entered primary education in 1970 attained this level. However, more children in Africa than in Latin America or South Asia were able to finish the fourth grade (Fredriksen 1978). Here again, there is considerable variation between countries, between urban and rural areas, and between males and females. In India, for example, out of 1,000 entrants to primary schools, only 475 boys and 407 girls are still in school after five years. In Cambodia, only 226 girls and 439 boys are still in school after six years and, in Syria, 68 girls and 80 boys (Bowman and Anderson 1978). Data from Algeria show that only 39 percent of the boys and 30 percent of 1,000 entrants completed six years of primary education.

In general, educational wastage is higher in rural areas and for girl students. Thus, in Algeria, the educational wastage of female students was much higher in rural areas (where only 21 percent of the women gradu-

ated) than in urban areas (where 36 percent of t' s women succeeded in graduating). Also, the discrepancies between Algerian male and female graduates were larger in rural areas where 19 percent more boys than girls graduated than in urban areas where only 7 percent more boys than girls graduated (Brimer and Pauli 1971).

It is of interest to note that, although girl students show greater rates of educational wastage than boys, their wastage is more often due to dropping out while boys' wastage is more often due to repetition of grades (Brimer and Pauli 1971; Dubbeldam 1970). Girls' attrition from primary school seems, therefore, to be less due to failure to be promoted than to withdrawing from school for non-scholastic reasons. Boys, on the other hand, tend to "hang on" regardless of scholastic performance. Some detailed data from rural India reports that boys show greater persistence in school than girls (Asubramanian 1977).

A small but in-depth study of rural school girls in Ghana illustrates clearly the factors responsible for many girls' withdrawal from school. Schoolgirls in the elementary school ranged from 6 to 20 years, with one-fifth 18 or older. Half of the girls dropping out of school were 18 or older and another one-third were 16-17 (Akuffo 1978). The age range of the rural Ghanian schoolgirls is not unusual for the rural areas of many African countries. It is caused by delayed entry into school as well as by temporary dropping out and re-entry into the same grade after some delay or by grade repetition due to failure. The older the schoolgirls, the greater the possibility that they will drop out because they get married, because they get pregnant, or because they lose interest in school (especially if they can do some kind of work to earn some money). The Ghanian case study demonstrates these trends. Thirty-eight percent

of the schoolgirls who dropped out of school did so because they became pregnant. Over 20 percent of the dropouts were engaged in some economic activity to raise some money and about 80 percent of them did some kind of trading, either as helpers to their mothers or guardians or by themselves. These girls are introduced to trading from an early age (6-16 years old) often by keeping the daily accounts of their mothers' sales; they are thus exposed to the possibility of immediate monetary rewards without the benefit of schooling (Akuffo 1978).

The relationship between early marriage and withdrawal from school is self-evident. In Pakistan, for example, only 2 percent of girls aged 15-19 were enrolled in school, while 75 percent were married (Youssef 1976). The overall trend for developing countries is a negative relationship between early marriage and school enrollment. More specifically, where girls 15-19 years old defer marriage, their rates of school enrollment tend to be the same for both sexes, but where they marry young, their enrollment rates are much lower than men's (UN Commission). Because a considerable percentage of the girls enrolled in primary school are over 14 years old, marriage interferes widely with graduation from primary school.

The Importance of an Elementary School Education

Rural girls' access to formal education is the key to their integration into the mainstream development efforts of their countries and to better employment and even marital options. Graduation from elementary school is crucial for rural girls because:

1. it firmly established literacy, and it opens up options to participate in types of vocational training such as agriculture and cooperative training;

2. it increases their ability to take part in varied rural development efforts and related non-formal, experimental educational programs;

3. it contributes to more extensive literacy and schooling for subsequent generations;

4. it enhances family nutrition, since mothers' education has been found to improve the nutritional status of children (Cravioto 1966);

5. it tends to make women more receptive to family planning;

6. it helps women to benefit more from different types of non-formal education (Derryck 1978);

7. it is related to increased farm productivity.

The importance of mothers' education for children's education and nutritional status (as well as for their health) is such that the argument for educating Third World women could be made in the interests of future generations alone. The poverty cycle cannot be broken as long as women do not have access to primary education. Iranian data show rural adult male literacy to be more closely associated with the schooling of boys than of girls, while a higher adult female literacy improves schooling of both boys and girls about equally (Fattahipour-Fard 1963). Another study shows that, in Senegal, children's regularity of attendance at primary school as well as their aspirations to more education is influenced by the mothers' literacy and level of education (Eliou 1973).

But equally significant is the accumulating evidence that primary education helps increase farm productivity. In India, for example, literate farmers were found to produce higher yields per acre (McGrath 1979). And a recent survey of 18 studies examining the relationship between farmer education and farm efficiency finds average farm productivity to be 7 percent higher among farmers with four years of schooling than among those with none (Lockheed, Jamison and Lau, forthcoming). We, therefore, expect

that literacy similarly will increase productivity among women farmers because they will then have access to agricultural and cooperative training, seek more contact with agricultural extension workers, are more aware of and more open to existing nonformal programs, facilities (e.g., agricultural credit) and strategies that can increase their productivity, and are better able to implement new ideas and to use existing facilities. Graduation from primary school strengthens rural women's linkage with the "modern" world; it is an important step toward becoming "integrated" into rural development.

Thus far we have examined access to primary education among rural women as a means of improving their options within the rural context; we must also examine its relevance for options outside the rural context. Primary school education will also provide rural women with the option of migration to urban areas since there is considerable evidence that formal education is related to higher rural-to-urban migration rates (Mangum 1977). However, this relationship is stronger in areas where women are less widely and actively in agriculture, as is more often true in some Latin American countries and the Near East than in Africa (Derryck 1978). To the extent that women's increased access to formal education is not accompanied by increased access to agricultural training, rural women's formal education may lead to their migration to the cities. If, however, rural women's primary school graduation were followed up by agricultural training, many women would become productive farmers instead of seeking an uncertain future in the cities.

In some rural areas, however, the available agricultural land is limited and of poor quality and cannot absorb everybody's labor even at a subsistence level, regardless of economically feasible improvements. In

these cases, it is important for rural women to have the option of migration to urban areas instead of having to stay in totally unproductive farms abandoned by men. In these cases, primary school education opens avenues to valuable vocational training programs. Increasing urbanization, especially in Africa, is an inevitable reality and rural women must have formal elementary school education as a basic skill aiding them in their rural-to-urban transition (Boserup 1970).

Finally, primary school education is a basic prerequisite for women's access to higher education and thus to upward social mobility. Even if only a handful of rural girls have the opportunity to continue their education, they should not be denied this option because, for some reason, they were not able to complete primary school.

II. Obstacles to Rural Women's Attending and Completing Elementary Education

The obstacles to rural women's access to elementary education can be grouped in the following categories: (1) competing household and childcare tasks and responsibilities; (2) competing involvement in productive economic activities; (3) parents', and especially fathers', negative attitudes toward daughters' education; (4) parents' limited financial and educational resources; (5) shortage of schools; (6) shortage of women elementary school teachers combined with male teachers' negative attitudes toward women's education and ability to learn; (7) dropping out of school because of pregnancy or marriage; (8) poor school performance and dropping out of school because of malnutrition and chronic infections; and (9) educational sex-segregation.

Competing household and childcare tasks and responsibilities. In most

developing nations, young girls begin to have household and childcare tasks and responsibilities at a very early age, often when they are 5-6 years old. In the urban slums and the rural areas of the Third World this situation is illustrated by the familiar sight of a six-year-old girl carrying a baby in her arms and another child trailing behind her. The mother role is thrust upon girls from childhood on and it continues throughout life. The absence of alternative roles surely increases prevailing fertility rates.

Time budget studies conducted in rural areas of several developing countries show clearly how young girls have to spend much more time in household and childcare tasks than boys and are, thus, less able than boys to attend school and to do their homework. In rural Java, for example, girls 6-8 years old spend 1.7 hours per day in childcare while boys of the same age spend 1.2 hours. Girls 9-11 years old spend 1.9 hours per day doing household tasks while boys of the same age spend only 0.9 hours and more hours in school than girls (3.5 hours instead of 2.9 hours spent in school by girls). In rural Nepal, girls 6-8 years old spend over eight times more hours in childcare than boys of the same age and one-fifth the number of hours in school (Nag, et al. 1978). In rural Peru daughters are much more likely than sons to help with cooking and washing and, above age 10, to substitute for mothers in the preparation of meals (Deere 1978). The same trend has been found in rural Yemen (Myntti 1978), rural Bangladesh (Cain 1977), and Botswana (Mueller 1978).

The fact that rural girls, especially older daughters, are given more childcare and housework tasks and responsibilities than boys affects their access to education both directly and indirectly. Girls are not sent to school at all or are withdrawn earlier than boys; they are also

made to miss school in order to stay home and take care of younger siblings and do housework. Days and hours of school missed interfere with their ability to follow lessons and to perform satisfactorily. Thus girls receive bad grades, repeat classes and eventually lose interest in school; and male teachers' negative attitudes about girls' ability to learn are further reinforced. Furthermore, because the childcare and household tasks compete with time (particularly precious daylight hours) available for studying, girls have much less time to do their homework and are thus placed at a disadvantage in school—until at last they follow the path of least resistance and drop out of school.

Competing involvement in productive activities. Children's involvement in different types of productive activities varies considerably by cultural area, country and region. In some countries, boys are much more often involved in productive activities than girls, as has been documented for the village of Char Jopalpur in Bangladesh (Cain 1977) and rural Botswana (Mueller 1978). In other areas such as rural Java, it has been found that boys spend more time than girls in agricultural activities, but girls spend more time than boys in handicrafts, while in rural Nepal, girls over 9 years of age spend more time than boys in agricultural activities (Nag, et al. 1978). Water carrying is often girls' responsibility. In rural Yemen, for example, girls begin carrying water in small containers over their heads from the age of 6, and by the time they are 10, they are responsible for providing the household with water. (Myntti 1978). A survey in Kivu Province, Zaire, shows that boys up to the age of 10 were not at all involved in productive activities while girls 5-9 years old helped with weeding and water carrying (Mitchnik 1972). Where girls have responsibility for time-consuming work earlier

than boys, the boys get an important headstart in primary education. In all cases, girls spend a considerably greater total number of hours than boys in household tasks, childcare, and productive activities combined, which seriously interferes with both school attendance and school performance.

In West Africa, girls are heavily involved from an early age in their mothers' trading activities in addition to childcare and housework and, thus, often lose interest in school since they have little time and opportunity to study. Also the more immediate opportunity to gain some money overshadows any potential long-range gains from education. Because West African rural women traders are very often illiterate, they do not value formal education for their daughters and are not always able themselves to see the link between education and more "modern" western-style commerce which might afford greater success.

Parents' negative attitudes toward daughters' education. In many developing countries, parents feel that it is much more important to educate sons than daughters because sons are expected to support old parents, and daughters are expected to marry and be supported by their husbands (Akuffo 1978; Robertson 1974; Huntington 1975). The lower priority given to daughters' education is further justified by the higher cost of such education because girls attending school are not available to help at home. There is an immediate need for girls as household labor, but boys are valuable as social security; therefore time allocated to education interferes with girls' usefulness while, on the contrary, such time enhances boys' value as social security.

In addition to the perceived lesser functionality of education for girls whose labor is needed at home, parents often hesitate to educate

their daughters because they fear that education will make them disobedient, disrespectful and "bad" daughters and wives no longer abiding by the local traditions (Mbolinyi 1972). This resistance becomes extreme in Muslim countries and regions in which marriageability requires women's virginity, sexual purity, and absence of any contact with men. In such societies, parents see early marriage as the best protection of a girl's good reputation and they are anxious to marry their daughters as soon as possible, thus transferring the responsibility for their sexual and moral conduct to their husbands (Youssef 1976; Myntti 1978).

In general, parents' motivation to educate their daughters remains quite low wherever literate and educated wives are not particularly valued and sought after as partners and wherever women are not perceived to be as economically active as men.

Parents' limited financial and educational resources. As we saw earlier, illiterate mothers seem to contribute to all children's, especially to daughters', illiteracy and poor school performance. But an apparently more significant barrier to rural girls' elementary school attendance is poverty; this is particularly powerful when combined with traditional values downplaying women's education and membership in a low status, disdained ethnic or religious group. In fact, poverty and tradition often coincide since rural and poor people usually uphold traditional values much more faithfully than others. Since girls' formal education is defined as a luxury in the rural context, the poorer the parents, the greater the probability that daughters will have less access to formal education than sons. In rural Malaysia, for example, parents' low socio-economic status represents an important barrier to Chinese (but not as

much to Malay) women's access to formal education while it does not constitute a barrier to Chinese men (Dropout Study 1973). In India the daughters of Harijans and other scheduled castes have less access to literacy and primary education than daughters in other rural families, and within each caste category, increases in the size of parental land-holding has twice as great an impact on girls' access to schooling as boys' (Choldin 1971; Joshi and Rao 1964). The greater the ability of parents to pay the fees and to buy the books and clothes necessary for the education of all children, the greater the daughters' chances to receive a formal education. The more, however, parents are compelled to set financial priorities, the more likely boys are to be educated at the expense of girls. Parents feel that investing in a son's education will have higher economic returns than investing in a daughter's education (Court and Ghai 1974). Furthermore, educated sons are expected to be better able to help with dowry and other expenses connected with daughters. Indeed, a study in Nepal showed that the more numerous the daughters in the family the more schooling the father wanted for his sons; presumably the sons would thus be better able to help with the financial "burden" of many daughters (Lockheed and Jamison 1979).

Shortage of schools. While shortage of schools in developing countries is a definite barrier to all children's school attendance, it constitutes an even greater barrier to poor, rural children and especially, to poor, rural girls. In Afghanistan, for example, where schools are sex-segregated from grades one to 12, only 12.4 percent of village schools (with 3-4 elementary grades) and primary schools are for girls (Hunt 1978). Urban slum areas and rural areas have the greatest shortage of schools

and rural girls suffer the most from this shortage because:

1. when schools are available only in other villages, and attendance requires walking long distances, parents are reluctant to send their daughters to schools, particularly where girls' sexual purity is carefully safeguarded (Bowman and Anderson 1978:69);

2. rural girls whose parents are poor are more handicapped by the shortage of schools than girls whose parents have sufficient resources to send her to school in another village or town;

3. in developing countries with sex-segregated primary schools, the shortage of girls' schools is disproportionately greater, particularly in rural areas. But even where the rural schools are co-educational, male teachers most often accommodate the boys if space is limited.

In addition to the shortage of school buildings and space, the almost complete lack of textbooks and educational material in rural schools affects negatively boys' and girls' interest in school as well as learning (Heyneman and Jamison 1980). At least some of the educational wastage among rural boys and girls is attributable to low motivation created by the lack of textbooks and other written material.

Shortage of women elementary school teachers. Although elementary school teaching is almost universally a "feminine" occupation, women are seldom teachers in the very poorest countries or in the poorest regions of other countries. Thus only 2 percent of primary school teachers are women in Bangladesh, 18 percent in Afghanistan, 21 percent in Morocco and 28 percent in Liberia, but in Jamaica 79 percent of teachers are women, in Nicaragua, 79 percent, in Philippines, 78 percent and in Mexico, 61 percent (Joshi and Rao 1964). Women elementary school teachers are disproportionately concentrated in cities. For example, 50 percent of elementary school teachers in Lagos are women, only 15 percent are women in Muslim North Nigeria and 17 percent in East Nigeria (Calcott). And in Afghanistan,

only 1.4 percent of teachers in village schools are women. Women teachers often prefer to stay unemployed in urban areas rather than accept a job in a rural school because of lack of housing, low salaries and the difficult life for young single women in a rural area. This is particularly true in Muslim societies in which the honor code makes it very difficult for a single woman to live alone in a small rural community. In Pakistan, for example, it has been reported that women teachers' absenteeism is very high and sometimes they remain on the payroll without ever going to the assigned location, so that the school exists only in official records (The Fifth Five Year Plan 1975:para. 11).

The importance of women elementary school teachers is highlighted by UNESCO data showing that the percentage of elementary school children who are female increases proportionately with the percentage of elementary school teachers who are women (UNESCO 1975). It is, of course, possible that this relationship is due to the fact that the same factors are responsible for girls' higher access to primary education and for women's choice of elementary school teaching as a career. But it is more plausible that the presence of women teachers encouarges parents to send their daughters to school because it establishes the potential economic usefulness and social status of women's education and that women teachers hold less negative attitudes toward girl pupils than men teachers (Fakhouri 1972; Fattahipour-Fard 1963). In many rural Muslim areas (for example, rural Bangladesh) only women teachers are permitted to teach girls; therefore the very low percentage (2 percent) of women primary school teachers must increase drastically if rural girls are to gain access to primary school education.

The beneficial effect of women primary teachers on girls' educational

chances may be also due to the possibility that they discriminate against girls less than male teachers. Possibly they do not have uniformly low achievement expectations of girl students, and they may not structure the classroom environment so that the odds of girls' success are low. In Senegal, for example, Wolof girls were placed by the (male) teachers at the back of the classroom from where they could not hear well and could not follow class proceedings. Their scholastic performance was poor, reinforcing their teachers' low expectations. Eventually, they became discouraged and dropped out of school or were sent home by the teachers.

Malnutrition and chronic infections. While malnutrition is often widespread among children in the rural areas of many developing countries, some evidence indicates that it is more widespread among pre-adolescent and adolescent girls than boys (Safilios-Rothschild 1971). A study of malnutrition among children in rural Punjab showed that girls were more often malnourished than boys regardless of their caste. Despite variation in the incidence of malnutrition between caste, within each caste there were three or more malnourished girls for each malnourished boy (Interactions 1972). Furthermore, field studies undertaken by the Indian Council of Medical Research showed that in 1971 girls outnumbered boys four to three among children with Kwashiorkor (Martin 1975). In rural Philippines, it was found that families spent more money on food for boys than for girls, especially in the one to six year old age group (400 and 287 peros respectively). And in rural Guatemala, a protein supplement improved girls' mental development scores of girls from the poorest families more than boys', since boys tend to be treated preferentially when resources (food or money) are scarce (Engle 1978).

It seems, therefore, that the greater the scarcity of food and financial resources in the Third World's rural areas, the greater the probability that girls will be malnourished and that their mental development may be low. There is considerable research evidence from a number of developing countries that malnutrition affects children's mental development and ability to learn (Smart 1972). Children who were treated for malnutrition when they were toddlers were found to perform 25 percent of a standard deviation below the mean in scholastic achievement at the primary school level (Heyneman and Jamison 1980). Malnourished children have shorter attention spans, display lower stamina, are more apathetic, and cannot concentrate; their hearing as well as their memory may be poor and their cognitive abilities may be impaired (Cravito 1966; Smart 1972). Because malnourished children are apathetic and lack motivation, concentration, and responsiveness, teachers are less responsive to them and interact less with them; the serious repercussions for learning and for staying on in school are evident. In fact, studies from Thailand and Nigeria empirically link malnutrition and ill health to irregular attendance, failure in examinations, and dropping out of school (Brimer and Pauli 1971). Since girls are more often malnourished than boys and spend more time than boys in childcare, housework and agricultural activities, they are more likely to be tired when they are in class and may have great difficulty concentrating, performing well and staying in school.

Furthermore, malnutrition lowers resistance to infectious and parasitic diseases, and parasitic diseases contribute to malnutrition (Smart 1972). Light infections with Ascariasis, for example, diminish children's ability to absorb nutrients so that 3 percent of ingested calories are lost and heavy infections can lead to non-utilization of

25 percent of ingested calories (Latham, Latham and Basta 1977). Malnourished children are found to suffer from chronic infections such as ear, eye, skin and upper respiratory diseases (colds, bronchitis, asthma) which further lower their stamina and impair their ability to attend school, to concentrate, and to perform at a satisfactory level.[1]

Educational sex-segregation. The existence of sex-segregation at the primary school level more clearly than at the secondary school level indicates the prevalence of traditional sex role stereotypes and women's inferior status. We could, therefore, hypothesize that sex-segregation represents an additional barrier to women's access to formal education. But insufficient data are available from rural areas of Third World to test this hypothesis.

III. Factors Facilitating Rural Girls' Access to Formal Education

No brothers in the family. When there are only daughters, parents may often choose the most intelligent girl (as a substitute for the missing son), educate her as much as it is possible and have high aspirations for her. In the absence of sons, parents cannot give priority to their education and daughters have a better probability of attending school (Stein 1975).

Visible disabilities. Girls with visible disabilities, congenital or acquired in childhood, are encouraged, if not obliged, to get educated by their parents. In an epidemiological study of chronic disabilities including the study of attitudes toward the disabled, in rural Orissa and Maharashtra in India, it was found that the visible disability was viewed as a clear obstacle to the girls' ability to marry. They were, therefore, educated in order to obtain the necessary skills for survival. In this

situation, if the school was far away or if the girl could not walk, the girl's father was willing to carry her back and forth to school. It is interesting to note that boys' disabilities did not necessarily increase their chances of schooling; on the contrary, in some cases they became an additional obstacle.[2]

High socio-economic status. As discussed above, the higher the parents' socio-economic status, the greater the probability that rural girls will complete primary school.

Women's literacy and education enhances marriageability. The assertion made by the Indian National Committee on the Status of Women that "the strongest social support for girls' education comes from its increasing demand in the marriage market" is definitely confirmed with regard to primary school education (National Committee, India 1975). Literate women and women with a primary school education are by now more desirable brides than illiterate ones even in the rural areas of most developing countries such as India and Nigeria (the Muslim north) (Jacobson 1976; Peshkin 1973). At levels above elementary education, the evidence becomes mixed because the desirability of more educated wives is tempered by men's fears that well educated women will be unwilling to accept a subordinate position vis-à-vis their husbands.

The presence of female role models. As stated above, the presence of women teachers is usually related with girls' higher access to formal education. A similar but less strong relationship between the presence of women family planning motivators or health auxilliaries and access to schooling is suggested by a nutritional study carried out in several Guatemalan villages. The study reports that girls' mental development scores were improved partly because they were given a protein supplement

and partly because the model provided by the female nurses, nutritionists and program assistants engaged in the study provided girls with occupational role models. Improved mental development scores help the girls do better in school and their chances of staying longer in school improve, since usually only the smart girls are encouraged by teachers and parents alike (Engle 1978; Birdsall and McGreevey 1978).

IV. Policy Recommendations

Some of the policies which would help increase rural girls' access to primary school education are those policies increasing access of low income boys and girls to primary education. This is because sex differentials in access to primary education are greatest in lower income strata and in poorer districts. Such policies include:

1. Compulsory primary school education combined with self-help rural development projects to build and maintain schools utilizing local material and know-how. The community should also be responsible for providing housing for teachers, especially women teachers, thus partially subsidizing their expenses in order to attract and keep them. The teacher and the students, with the help of agricultural extension, could develop agricultural projects (such as small gardens) which could help support the school while providing the rural boys and girls with valuable agricultural information.

   Compulsory primary school education in a poor country faces barriers of policy adoption and implementation due to prohibitive costs. Involvement and material contributions by local communities increases the probability that a policy of compulsory primary

school education will, in fact, be implemented. Such an approach also provides schools in the students' own villages. Thus students will not have to walk often long distances, a factor increasing girls' rate of withdrawal from school.

No systematic evaluation data are available on whether compulsory primary school education actually improves rural girls' access to primary education.

2. The compulsory primary education should be strengthened by:
   a. giving teachers and students free textbooks and other educational material; this will dramatically improve the amount of knowledge available to students and increase their motivation to stay in school.
   b. offering students a food program with breakfast and lunch will reach the most frequently malnourished group, the rural school-age girls.
   c. providing basic education in hygiene, innoculations against infectious diseases, parasitic treatments, antibiotics, and vitamin supplements. The realistic implementation of this policy requires that teachers (especially those to serve in rural and low-income urban areas) receive some basic education in hygiene and health as well as some practical health skills such as being able to innoculate the students. Alternatively, where auxiliary health workers are already present at the village level, these workers should undertake this role within the schools.
3. Policies and programs helping to decrease the excessive time spent by rural women in household work will reduce the part of

those burdens falling on children, especially daughters. Such assistance includes providing rural communities with accessible water so that girls need not walk long distances to provide the household with water. Other aids would involve the development of appropriate technology which is cheap and easy to use to relieve women's and girl's housework burdens. Also, community development workers and rural mothers should devise rotating systems of childcare in which women exchange childcare services for farm labor, thus freeing their daughters from the constraining "child-mother" role. Such policies would diminish children's (and disproportionately, girls') immediate value as labor at home, making primary education a more viable and rational alternative.[3]

4. The calendar of rural primary schools could be adapted to cropping patterns (with vacations in periods of intensive labor demand) to maximize rural boys' and girls' school attendance.
5. Where the number of trained teachers is insufficient, trained teachers can be supplemented by locally recruited "assistant teachers" who, with less formal qualifications and lower salaries, can make the implementation of universal primary education possible. Some rural mothers or young rural women should be employed as "assistant teachers," to provide female role models in schools until more women teachers are educated and can be persuaded to accept rural posts. Such local "assistant teachers" often have better rapport with students and parents than teachers who have come from other areas, and may also make teachers from urban areas feel more comfortable about coming to

rural areas.

In addition to the general policies directed to all low-income children listed above, some additional policies directed specifically toward rural girls are needed in order to increase the probability that all policies benefit girls equally with boys. Such more direct policies are needed in order to overcome traditional sex role beliefs and resistance toward women's education still prevalent where women have sharply unequal educational chances in comparison to men. Such policies would include:

6. The intensification of women's training as primary school teachers through a variety of governmental and international aid programs providing training fellowships and subsidized housing to low-income (particularly rural) women willing to work for a number of years in rural areas. One such successful experiment took place in Nepal where, in 1968, girls represented 13 percent of the students enrolled in primary schools. The UNESCO project sought to train women primary school teachers, especially women from rural areas. It encouraged and facilitated such training by providing hostel accommodations, and improved the training curricula by including development-related subjects such as health, nutrition, sanitation, family planning, and childcare. The recruiting of eligible rural girls proved to be difficult due to the scarcity of women with the formal educational requirements, so the pool of potential candidates was enlarged by providing upgrading courses to rural girls with insufficient educational qualifications. A mid-term evaluation undertaken in 1973 showed a significant improvement in female enrollment. In

the districts covered by the program, girls constituted 24 percent of all primary school students, which represents a marked improvement (in one district the female proportion increased 19 percent). It is also important to note that rural parents viewed the presence of women teachers favorably and felt that these teachers would do much to encourage more students to enroll (UNESCO 1978).

7. In developing countries with sex-segregated primary schools, governments and international aid programs should build girls' primary schools in rural areas and make adequate provisions to staff them with women teachers. Alternatively, governmental and international organizations could encourage the building of girls' schools in rural areas through community self-help projects by providing incentives such as food-for-work. Efforts should also be made to maintain educational parity between boys' and girls' schools in terms of curricula, standards, teachers' qualifications, financial allocations, etc. In developing countries with co-educational primary schools, it should be made mandatory to enroll boys and girls in equal numbers.
8. Since it is very difficult to change the sex role stereotypes and teachers' biased beliefs so as to equalize their treatment of boys and girls in the classroom, it is desirable to change teachers' motivational structure and classroom behavior by manipulating rewards. In order to motivate primary school teachers to pay equal attention to and take equal interest in girls as in boys, their performance and promotions could include criteria reflecting percentage of girls who stay on and graduate from

primary school. Also, governments as well as national and international women's organizations could establish prizes for the most successful male and female primary school teachers.

9. Compulsory elementary education in rural areas should be accompanied by agricultural training equally accessible to boys and girls, with the admission of equal numbers of boys and girls strictly enforced. In these agricultural training programs, girls should not be tracked to separate, sex-appropriate programs; they should learn exactly the same skills as boys.

10. Governments and international aid programs should intensify the training of rural female paraprofessional workers such as agricultural extension workers, community health auxiliaries, or multi-purpose community workers. The training of such female paraprofessionals should be subsidized by means of training grants and subsidized shelter in exchange for several years of service in rural areas. The presence of these women workers in rural areas in increasing rural girls' access to education is of considerable importance since they establish, in parents' as well as in girls' minds, the economic and social status relevance and pay-off of girls' education.

11. Primary school textbooks should be thoroughly revised (or new ones written) so that they are free of blatantly sexist, demeaning statements about women and so that they render education relevant and meaningful to rural girls. Women should be portrayed as farmers, traders, teachers, nurses, agricultural extension workers, health auxiliaries, etc. Special competitions and awards for the best non-sexist textbooks could increase

authors' motivation and help produce the appropriate textbooks. In providing free textbooks to primary school teachers and students, governments and international aid programs are in a strong position to provide only nonsexist, high quality textbooks.

12. In view of the crucial importance of the mothers' education for their children's, and particularly their daughters', access to primary education as well as nutritional status, where illiteracy rates among adult women are high, literacy programs for illiterate mothers are greatly needed. Through literacy, mothers can become more interested in and more supportive of their daughters' education so that girls are sent to school and permitted to stay in school.

FOOTNOTES

[1]Unpublished data from an epidemiological study on chronic disability conducted by WHO in Orissa and Maharashtra in India and throughout Indonesia in 1978-79.

[2]Ibid.

[3]The underlying assumption that girls' freed time will be spent in school is, however, untested. In poor households, it is entirely possible that a competing alternative is involvement in income-generating activities.

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